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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/964,438	09/28/2001	Masahide Katsuki	06761.0045	1557

7590 07/24/2003

Finnegan, Henderson, Farabow,  
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Washington, DC 20005-3315

EXAMINER

JONES, JUDSON

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 07/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/964,438		KATSUKI ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Judson H Jones		2834	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese reference 11-206100. Japanese reference '100 discloses a linear motor drive having a fixed element 1, a movable element 60, both with parallel rows of magnets 3, 3, 61, 61 arrayed on both sides of a reference plane with a steel plate 62 parallel to the reference plane and having a triangular shape as shown in figure 6 and as described in paragraph 0008. While no guide mechanism is shown, one is required for the device to operate properly by keeping the movable member from striking the fixed member.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese reference 11-206100 in view of Newman et al. Japanese reference '100 discloses a linear motor drive having a fixed element 1, a movable element 60, both with parallel rows of magnets 3, 3, 61, 61 arrayed on both sides of a reference plane with a steel plate 62 parallel to the reference plane and

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having a triangular shape as shown in figure 6 and as described in paragraph 0008. While no guide mechanism is shown, one is required for the device to operate properly by keeping the movable member from striking the fixed member. The Japanese reference does not disclose electromagnets mounted to the fixed element and permanent magnets mounted to the movable element. Newman et al. teaches in column 2 lines 25-35 that both fixed and movable permanent magnets are known in the art and that each design has its advantages and disadvantages. Since Japanese reference '100 and Newman et al. are both from the same field of endeavor, it would have been obvious at the time the invention was made for one of ordinary skill in the art to have utilized permanent magnets on the movable part in order to avoid the problem of providing electrical current to the moving part.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese reference 11-206100 in view of Bader 5,763,965 A. Japanese reference discloses the linear motor drive but does not disclose a guide mechanism comprising a pair of V shaped grooves having planar symmetry with respect to the reference plane. Bader discloses V shaped guide grooves as shown in figure 1a for use in a precision table. Since Bader and Japanese reference '100 are both from the same field of endeavor, it would have been obvious at the time the invention was made for one of ordinary skill in the art to have utilized V shaped grooves for precision guides in the device of Japanese reference '100 as no guide mechanism was disclosed in that reference.

Applicant's arguments filed 11 June 2003 have been fully considered but they are not persuasive. In regard to examiner's burden of demonstrating how the Japanese reference can anticipate each and every limitations present in claims 1-3 and 5, see the last two lines on page 2 of the office action and the first five lines on page 3. Rather than placing an explanation of the

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Japanese reference in both the 102 (b) and the 103 rejections, the examiner put an explanation of the reference in the 103 rejection. Most but not all of the elements are identified by reference numerals. In regard to the at least parallel rows of second magnets mounted to the movable element, see permanent magnets 3 in on the fixed element and electro magnets 61 on both sides of the movable element 62 facing the permanent magnets as shown in figure 6. While applicant is correct in stating layered magnetic steel plates 13 are not arrayed in parallel on both sides of a reference plane, the coils 61 are placed in parallel on opposite sides of steel plates 12. (To be precise, steel plates 13, 23, 33, 53, 63 form auxiliary cores while coils 11, 21, 31, 51, 61 are wound on plates 12, 22, 32, 52, 62, depending on the figure and embodiment.)

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

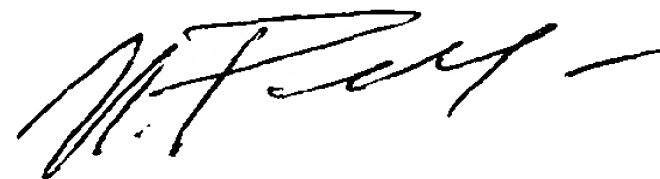
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Judson H Jones whose telephone number is 703-308-0115. The examiner can normally be reached on 8-4:30 M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 703-308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3431 for regular communications and 703-305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

JHJ   
July 17, 2003



**Nicholas Ponomarenko**  
**Primary Examiner**  
**Technology Center 2800**